

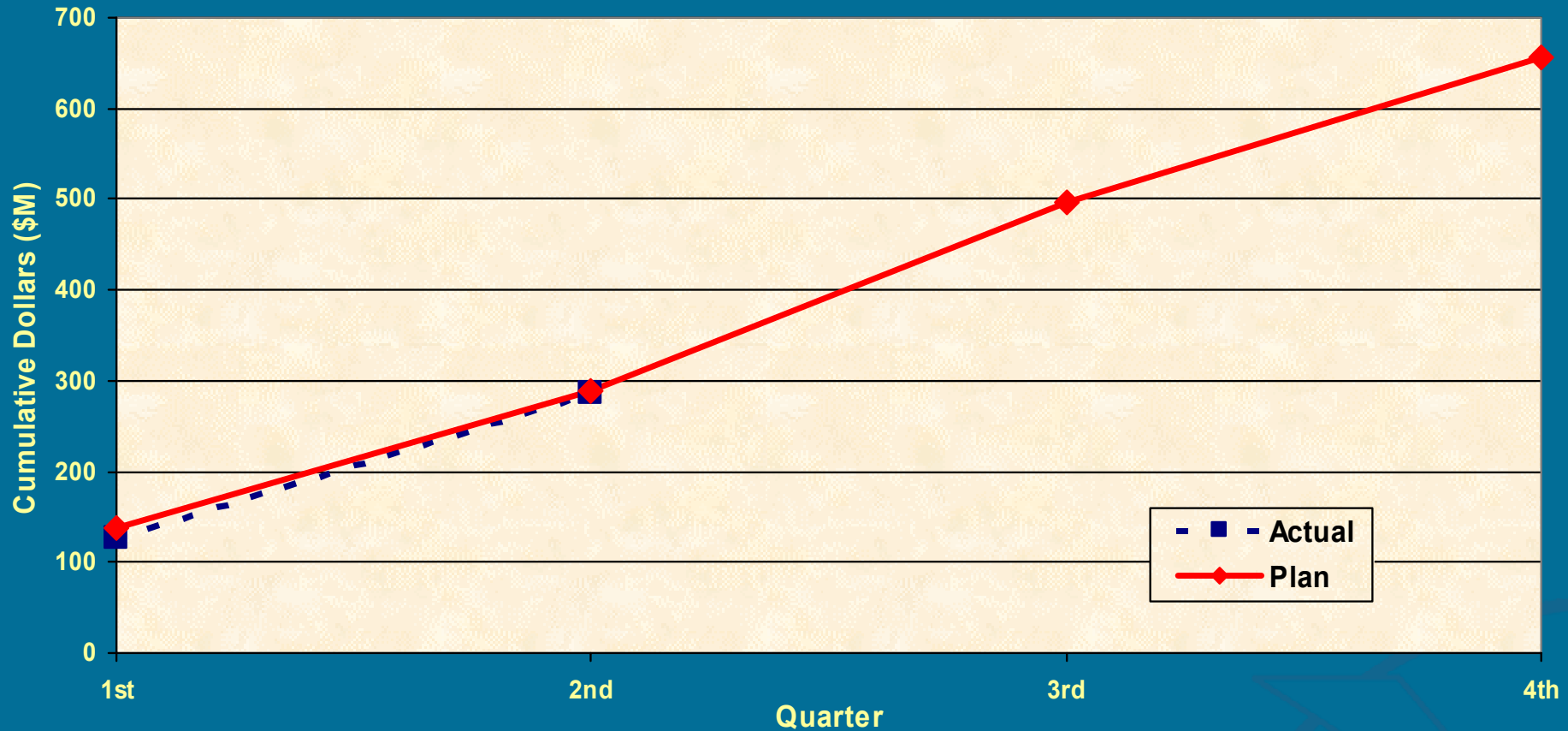


National Weather Service 2nd Quarter Review

May 29, 2003

NWS 2nd Quarter Actuals - OR&F

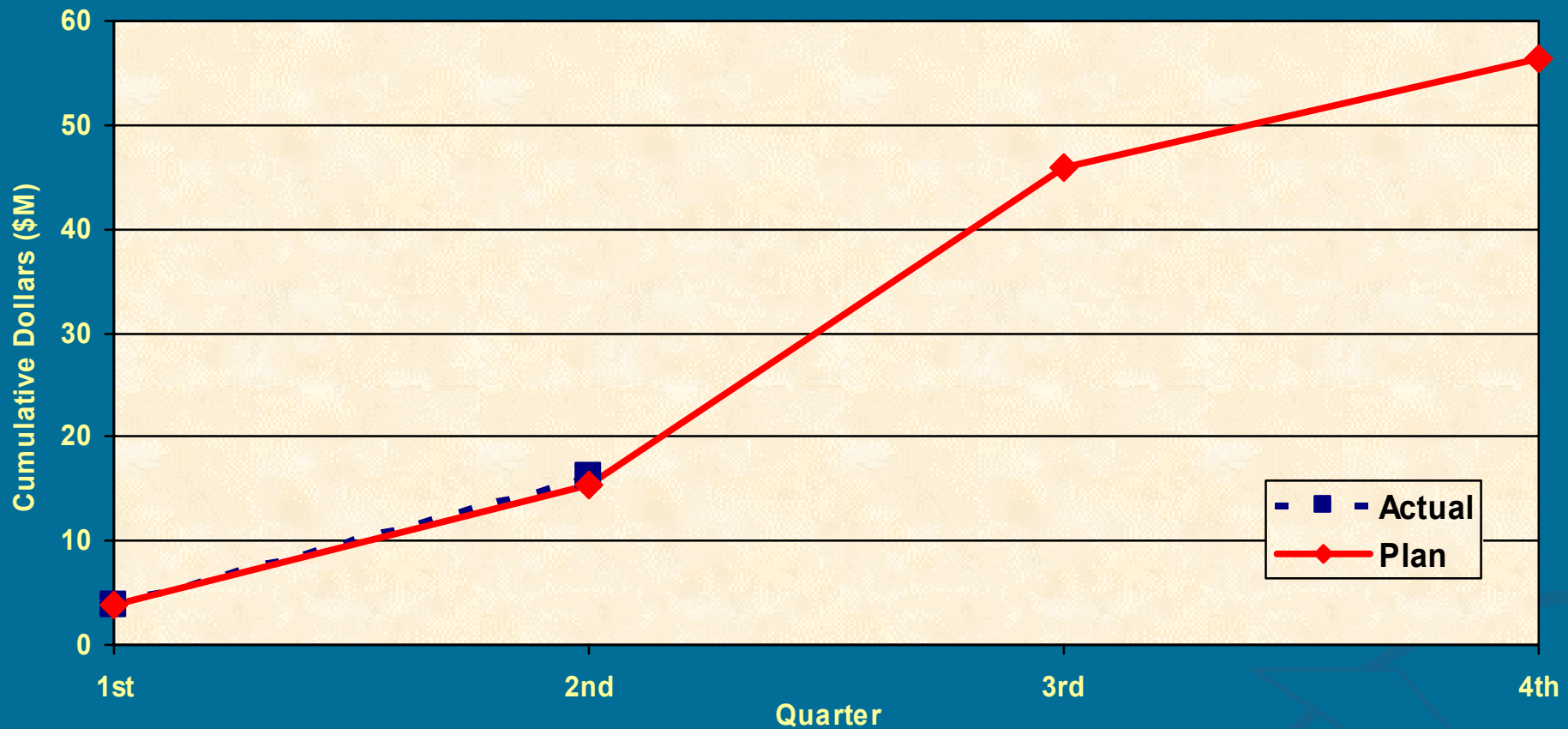
(\$ in Millions)



Plan	137.0	289.6	496.5	655.3
Actual	127.6	286.3	-	-

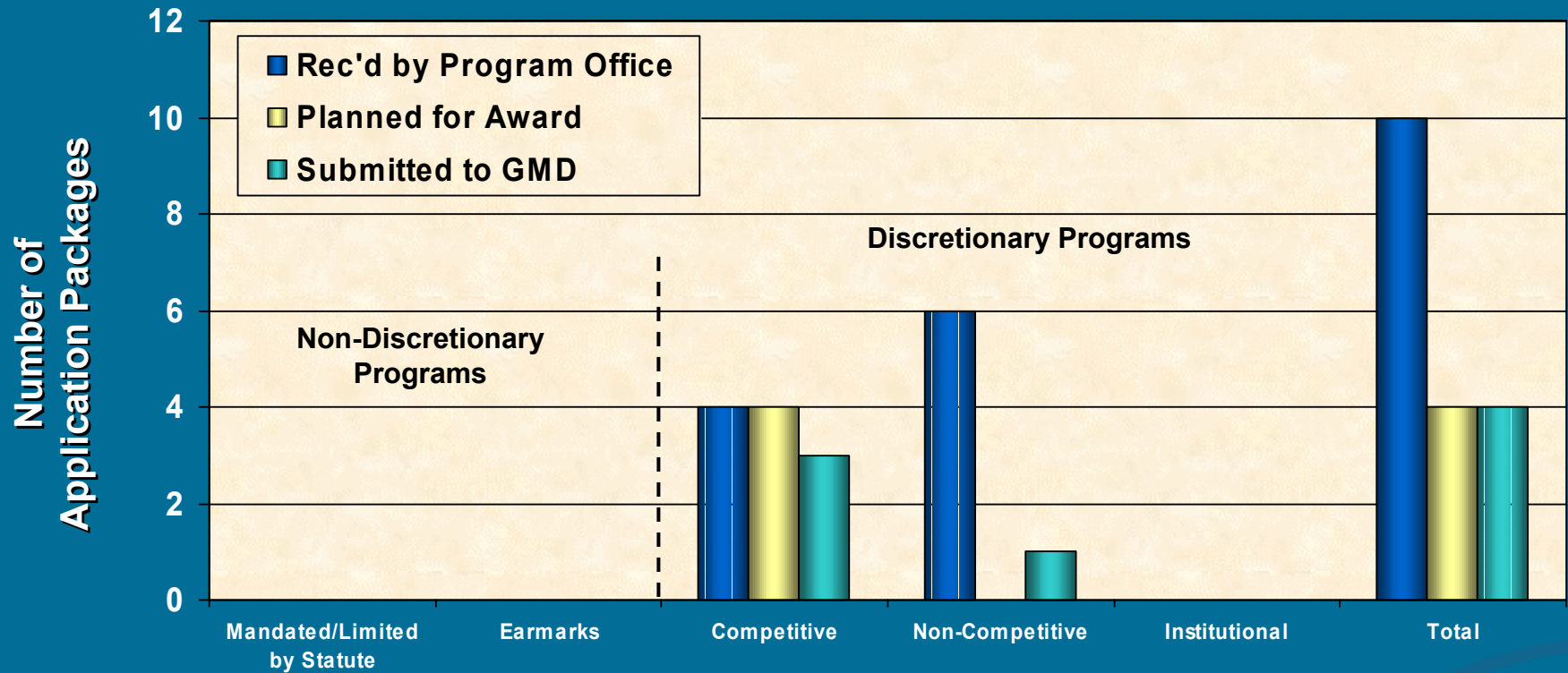
NWS 2nd Quarter Actuals - PAC

(\$ in Millions)



Plan	3.8	15.3	46.0	56.4
Actual	3.8	16.2	-	-

National Weather Service Grants Metric Cycle Times – 2nd Quarter



	1st Qtr	2nd Qtr	1st Qtr	2nd Qtr	1st Qtr	2nd Qtr	1st Qtr	2nd Qtr	1st Qtr	2nd Qtr	1st Qtr	2nd Qtr
# Received	-	-	0	0	0	4	3	6	-	-	3	10
# Planned*	-	-	-	-	0	4	-	-	-	-	-	4
# Submitted	-	-	0	0	0	3	2	1	-	-	2	4

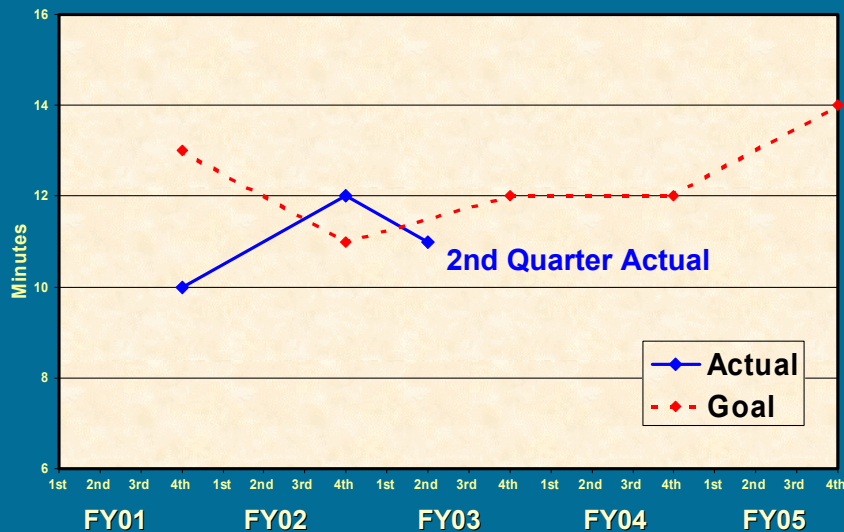
*Applicable to Competitive Grants Only

Strategic Plan Metrics

Tornado Lead Time



Tornado Lead Time



Funding

	FY01	FY02	FY03	FY04	FY05
NEXRAD PI (\$M)	8.3	8.3	8.2	12.0	11.4
NEXRAD O&M (\$M)	38.7	40.0	39.7	42.3	42.3
AWIPS PI (\$M)	15.9	16.3	16.2	14.1	11.9
AWIPS O&M (\$M)	35.3	36.5	36.3	37.6	37.6

Timeline/Next Steps

- NEXRAD: Open Radar Data Acquisition (FY05)
- AWIPS: LINUX Upgrades (FY02+)
- Improve forecaster capabilities:
 - Weather Event Simulator (FY03)
 - Advanced Weather Operations Course (FY05)
 - NOAA Diversity Best Practices at local offices (Ongoing)

Issues

- AWIPS:
 - Insufficient bandwidth
 - Insufficient processing speed
 - Insufficient out year product improvement budget

May 2003 Tornado Outbreak

- May 4-10: ~ 400 tornadoes reported
- Preliminary Average Lead Time: 18 min.
- 42 Fatalities



"Thank the National Weather Service for a great job in helping us"

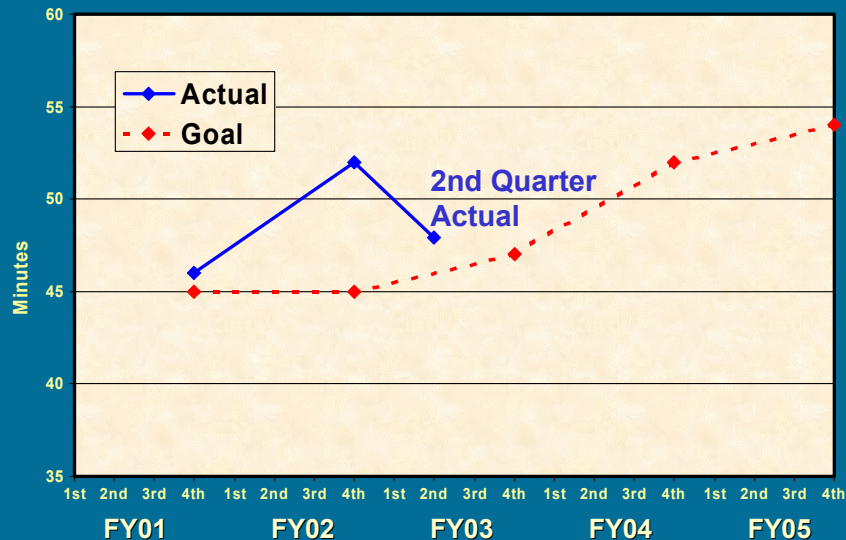
Missouri Governor Bob Holden on NBC Today, May 10, 2003

Strategic Plan Metrics

Flash Flood Lead Time



Flash Flood Lead Time



Funding

	FY01	FY02	FY03	FY04	FY05
NEXRAD PI (\$M)	8.3	8.3	8.2	12.0	11.4
NEXRAD O&M (\$M)	38.7	40.0	39.7	42.3	42.3
AWIPS PI (\$M)	15.9	16.3	16.2	14.1	11.9
AWIPS O&M (\$M)	35.3	36.5	36.3	37.6	37.6
AHPS	1.0	1.5	6.0	6.1	6.1
COOP	-	-	3.0	4.2	10.0

Timeline/Next Steps

- NEXRAD: Open Radar Data Acquisition (FY05)
- AWIPS: LINUX Upgrades (FY02+)
- Advanced Hydrologic Prediction Services (AHPS) (FY03-FY05)
- ASOS precipitation gauge (FY03/04)
- Cooperative Observer Network Modernization (COOP) FY03+)

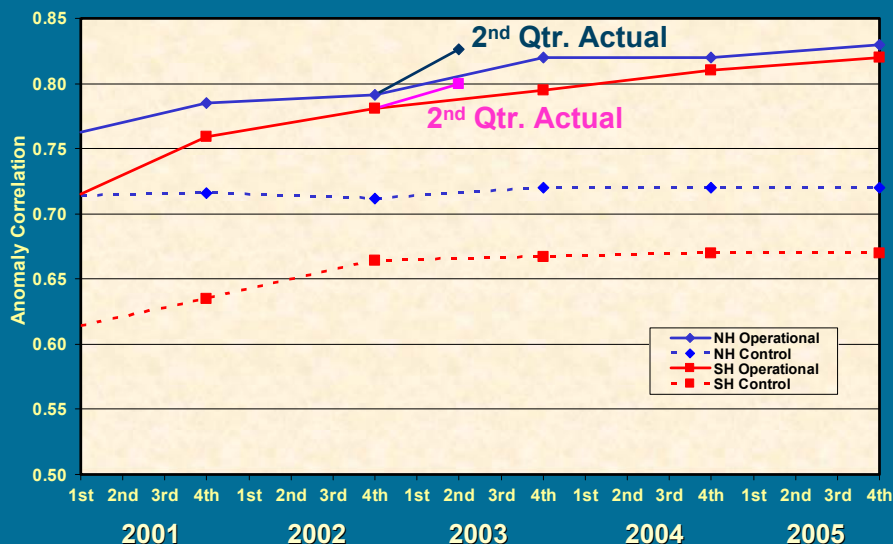
Issues

- AWIPS:
 - Insufficient bandwidth
 - Insufficient processing speed
 - Insufficient outyear product improvement budget
- AHPS and COOP Deployment Pacing

NOAA Strategic Plan Metrics

5 Day Global Weather Model Performance (Anomaly Correlation at 500mb)

Anomaly Correlation at 500mb



Funding



	2001	2002	2003	2004	2005
Budget (\$M)	1.2	1.5	1.6	1.7	1.7

Timeline/Next Steps

- High performance computer upgrades (FY03+)
- Improve data assimilation and modeling
 - Increase horizontal resolution (FY05/FY08)
 - Assimilate Atmospheric Infrared Sounder (AIRS) (FY04)
 - Improve cloud and radiative physics (FY05/FY06)

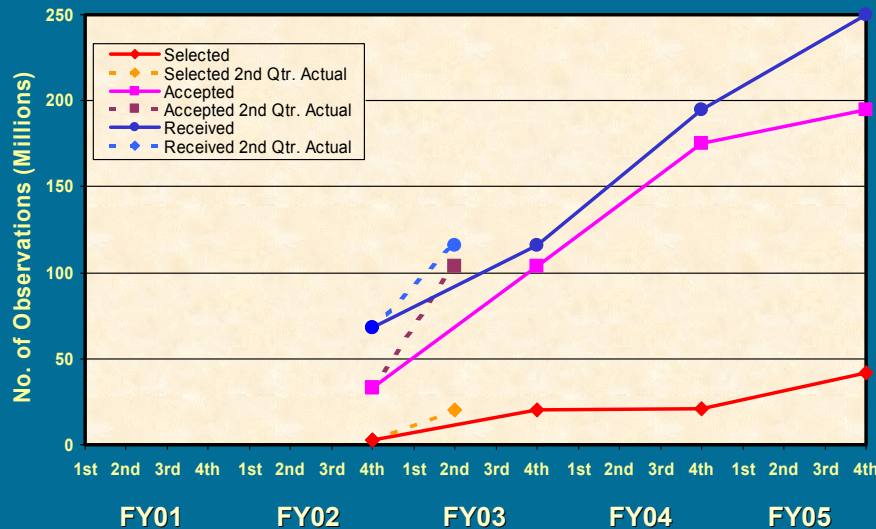
Issues

- Data Assimilation funding insufficient to provide capabilities for programmed satellite sensor data streams.
- Cold bias

Strategic Plan Metrics

Operational Usage of Satellite Data

Operational Usage of Satellite Data



Funding

	2001	2002	2003	2004	2005
Budget (\$M)	-	6.7	8.5	8.5	8.5
Supercomputer Backup (\$M)	-	-	-	7.2	7.2

Timeline/Next Steps

- Joint Center for Satellite Data Assimilation (JCSDA)
 - Atmospheric IR Sounder (AIRS) (FY04)
 - Advanced Microwave Scanning Radiometer (AMSR) (FY05)
 - Fund 13 research proposals (FY03)
- Supercomputer Backup (FY04)
- Data Assimilation and Modeling Initiative (FY05)

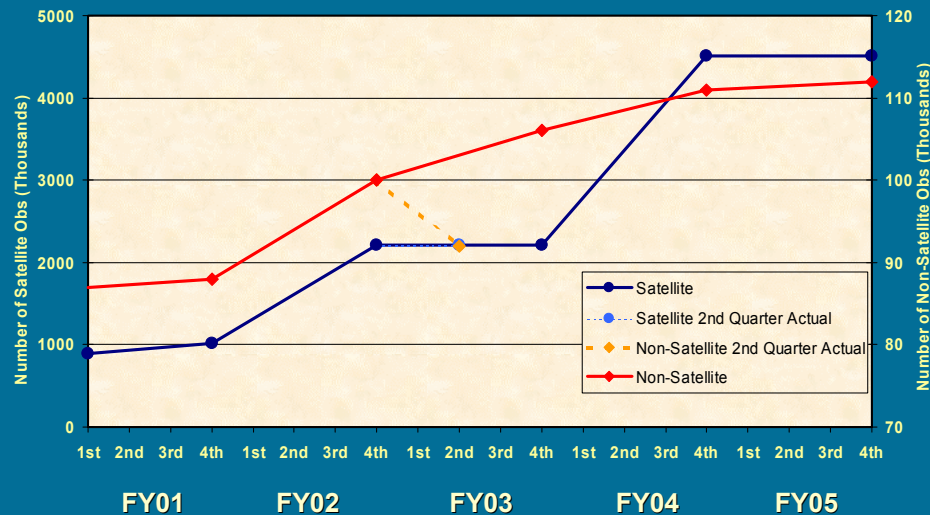
Issues

- Insufficient JCSDA funding to address growing number of programmed satellite sensor data streams
- Data assimilation advances dependent on Supercomputer Backup system (computational power)

Strategic Plan Metrics

Weekly Ocean Observations for Climate Models

Weekly Ocean Obs for Climate Models



Funding

	2001	2002	2003	2004	2005
Budget (\$M)	-	6.7	8.5	8.5	8.5
C-GOOS	-	-	-	2.2	8.3
CSI	-	-	-	-	1.0

Timeline/Next Steps

- **Enhanced and increased ocean observations**
 - ARGO floats (FY03-FY05)
 - NOAA-17 Advanced Very High Resolution Radiometer (FY04)
 - NWS Coastal Global Ocean Observing System (C-GOOS) (FY04/FY05)
 - Coastal Storms Initiative (CSI) (FY03+)

Issues

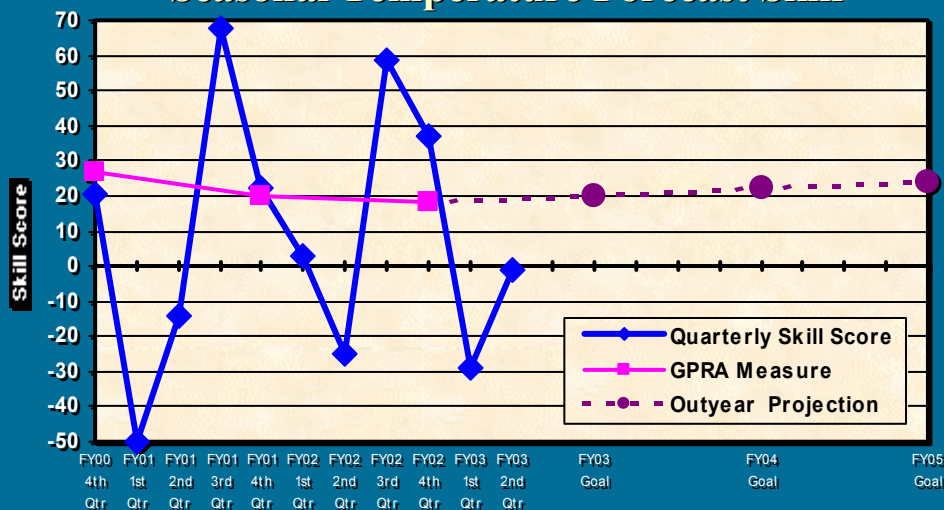
- **Outyear funding for ocean observation initiatives**
 - C-GOOS (FY04+)
 - CSI (FY03+)
- **Need for NOAA integrated ocean observations plan**

NOAA Strategic Plan Metrics

Climate Seasonal Temperature Forecast Skill



Seasonal Temperature Forecast Skill



Funding

	2001	2002	2003	2004	2005
Budget (\$M)	5.17	5.28	5.49	5.70	5.70

Timeline/Next Steps

- New empirical technique developed to combine long-term weather trends with ENSO (FY03)
- Global ocean data assimilation system (FY04)
- Utilization of multi-model ensembles in seasonal forecasts (FY05)

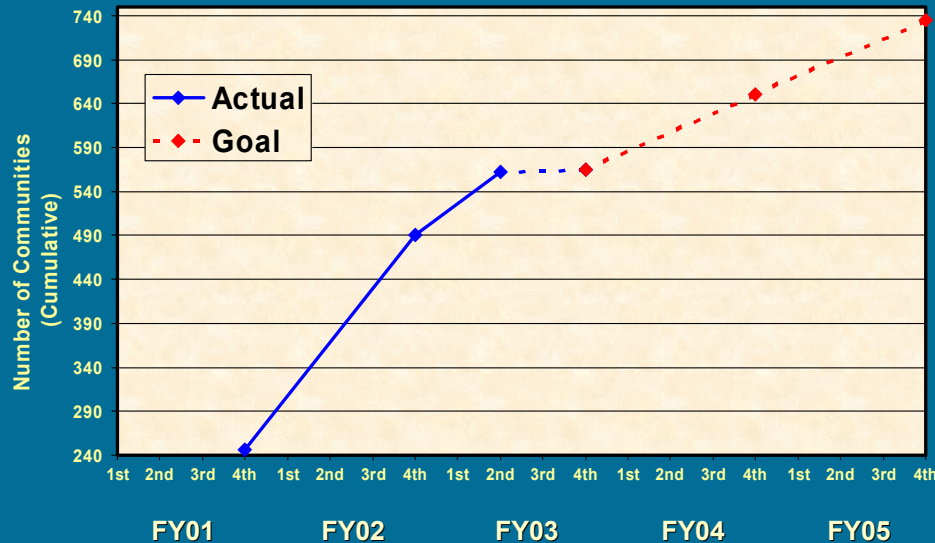
Issues

- Skill score projected to improve slowly
 - Relative infancy of climate forecasting
 - High unpredictability of many climate features

Strategic Plan Metrics

StormReady/TsunamiReady Communities

Number of StormReady Communities



Funding

	2001	2002	2003	2004	2005
	15.0	15.0	20.0	20.0	20.0

Timeline/Next Steps

- 900 StormReady communities (FY07)
- Continue to promote StormReady to Emergency Managers and community officials (Ongoing)
- Create on-line StormReady application (FY03)
- Develop new StormReady promotional materials (Ongoing)

Issues

- Increased workload on communities combined with limited resources
 - Homeland Security has become the highest priority for Emergency Managers and communities

NOAA

Congressional Reports

Maryland Tornado Report

<i>Action</i>	<i>Due Date</i>	<i>Completion Date</i>
NWS Forwards to NOAA	12/16/02	12/13/02
NOAA Forwards to DOC	-	12/23/02
DOC Forwards to OMB	-	1/24/03
OMB Provides Clearance	-	3/13/03
DOC Forwards to Congress	February 2003	4/8/03

NOAA Congressional Reports

Etheridge Report

<i>Action</i>	<i>Due Date</i>	<i>Completion Date</i>
NWS Forwards to NOAA	Not Established	4/10/03
NOAA Forwards to DOC	-	4/23/03
DOC Forwards to OMB	-	5/2/03
OMB Provides Clearance	-	Estimated Completion mid – June 2003
DOC Forwards to Congress	January 29, 2003	Pending